

MANUAL

Stainless steel spa

ELSYspas

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Read the entire manual before using your bath.

The manual applies to our built-in models in size

- 2x2
- 2,4x2
- 2,4x2,4
- 2x3
- 2,4x3
- As well as built-in models in custom-adapted size

Thank you for choosing us as the supplier of your spa.

We hope the bath will give you many wonderful baths and pleasant moments.

Important! Read the manual carefully and follow our safety instructions, advice and recommendations.

This manual will describe what is important to consider before, during and after the installation of your bath. If you have any questions, you are welcome to contact us at info@elsyspas.com

1. Safety Warnings

Electrical safety:

- **WARNING:** Risk of electric shock – The spa must be installed by a qualified electrician in accordance with local regulations and instructions. Check that the spa is correctly grounded and that a residual current device (RCD) is installed.
- **POWER OFF** – All electrical power to the spa must be switched off during maintenance or repair. Use only approved cables and components. Regular inspection of electrical components and piping is recommended at least twice a year.

Water and chemical handling:

- **WARNING:** Risk of chemical burns – Use the correct dosage of chemicals to avoid overexposure. Follow all recommendations from the manufacturer of pool chemicals. Store chemicals in a safe manner and out of reach of children.
- **NO SALT WATER** – Do not use salt water in the spa as it can affect materials and components despite the bath being made of stainless steel.

Temperature and burns:

- **WARNING:** Risk of burns – Do not use the spa if the water temperature exceeds 40 °C. High temperatures can cause overheating or unconsciousness, especially in children, the elderly or persons with health problems. Always check the water temperature before you or anyone else gets into the bath. Max temp in the bath is 40 degrees. A significantly lower temperature is recommended for small children.

Risk of drowning:

- **WARNING:** Risk of drowning – Never leave children or persons who cannot swim unsupervised in or around the spa. Always use a safety cover when the bath is not in use. It is your own responsibility to secure both children and adults in the bath.
- **SAFETY COVER** – Make sure that the spa has the cover on and is locked when the bath is not in use to prevent accidents. The cover is not made to be loaded with weight. Remove snow and water that lies on the cover.
- **Slip risk.** Warn bathers, especially children and the elderly, of the slip risk in and around the bath. Ask them to take the greatest care when entering and exiting the bath as well as around the bath.

2. Installation Instructions

- **Placement requirements:** Make sure that the spa is placed on a stable, level surface that can withstand the total weight of the bath including water and users. See further in the manual for more detailed information about built-in installation.
- **Ventilation:** If the spa is installed indoors, make sure there is sufficient ventilation to avoid moisture buildup and damage to the building's structure. Contact, for example, a building engineer or building architect. A ventilation expert is recommended to contact.
- **Distance from electricity and water:** Check that no electrical components are in direct contact with water, and keep all connections dry. Keep electrical components at least 1.5 meters from the bath. Do not place the bath under a power line.

3. Maintenance and Service

- **Warning for maintenance of electrical parts:** All repairs or replacement of electrical components must be carried out by a qualified electrician. The power must always be cut during service or repair.
- **Check seals and connections:** Inspect seals regularly to prevent leakage that can lead to moisture damage/damage.
- **Stainless steel maintenance:** The spa is manufactured in stainless steel, it is recommended to rinse off any residues of chlorine and chemicals regularly to prevent discoloration. When emptying the spa of water, the bath must be flushed clean of water residues that may contain chlorine.

- **Use only tap water in the bath.** Water from lakes and seas can contain salt and also be dirty, which clogs the filter faster.

4. Warranty Terms The warranty applies provided that the manual's instructions are followed – Specification of warranty period and what the warranty covers can be found on our website. Exception from the warranty – The warranty does not apply if salt water is used or if installation or repairs are carried out by unauthorized personnel. Nor in the event of faulty maintenance, faulty assembly/installation. Damage/discoloration due to water quality is not covered by the warranty. Keep other metal at a distance, metal traces from other components can cause damage to the bath.

5. Troubleshooting Guide In the event of error messages, see the manual for the display.

6. Environment and Responsible Use

WARNING: Avoid overfilling – Do not overfill the spa, and monitor the water level to prevent overflow.

Environmental and water-saving tips To protect the environment and minimize water consumption, follow these recommendations:

1. Use an insulating cover: Keep the spa covered when not in use to reduce evaporation and retain heat, which reduces the need to top up water and saves energy.
2. Reuse water when possible: If the water needs to be drained from the bath, use it to water the garden or wash outdoor areas, provided that the chemical levels are safe for plants and the environment and it is approved by your municipality.
3. Adjust chemical use: Measure and add chemicals exactly according to the instructions to avoid overuse that may require unnecessary water changes.
4. Clean the filter regularly: Keep filters clean to optimize water flow and reduce the load on the cleaning system, which in turn can extend the lifespan of the water in the bath.
5. Top up instead of replacing: In case of evaporation, top up with water instead of replacing all the water, as the chemical levels and water quality are still good.
6. Plan bathing times: Use the spa efficiently by planning bathing times and avoiding keeping it running when it is not in use, which saves both water and energy.



Show your electrician our separate instructions for electrical connection.



CE All of our Spas are CE-marked.

7. Prevent Injuries

- Do not use glass or other fragile material in or around the bath.
- Use plastic glasses to avoid personal injuries in the bath as well as damage to the spa.
- Do not remove any part from the spa.
- Do not use the spa if any part is damaged or broken. Never repair anything without contacting us first.
- The water temperature in your bath must never be more than 40C. A temperature between 37-40 degrees is a safe temperature for healthy adults. A lower temperature is suitable for children and for use for more than 10 minutes. Have access to drinking water during bathing to avoid dehydration.
- Feel the water to make sure it is a good bathing temperature before you or anyone else jumps in.
- Pregnant women, overweight persons, persons with heart problems, low or high blood pressure, diabetes or other circulatory problems should consult a doctor before using the spa.
- Intake of drugs, alcohol or medication before or during use of your spa is not recommended and can lead to unconsciousness and possible drowning.
- Do not use the spa immediately after hard work.
- Persons with wounds or external infections should not use the spa. Warm water can stimulate the growth of infectious bacteria if the spa is not sufficiently disinfected and the chemical balance is not maintained correctly.
- Only use the spa for a reasonable time. Prolonged exposure to high temperatures can lead to a high body temperature, which can lead to dizziness, nausea, drowsiness, unconsciousness, reduced awareness and an inability to get out of the spa. These effects can lead to eventual drowning.
- Be attentive when entering and exiting the bath.
- To avoid accidents, make sure that the surface around the spa has good drainage and a good slip-resistant surface. As a private person, you inform your bathing guests of this, and at public baths a warning sign about slip risk must be installed.
- Do not use the spa on your own.
- Do not jump or dive into the spa.
- Be attentive to the maximum number of bathers in the spa.

Max number of bathers:

2x2	6 persons
2,4x2	8 persons
2,4x2,4	10 persons
2x3	12 persons
2,4x3	14 persons

If you have a custom-ordered bath, use these measurements as a guideline or ask us if you are unsure.

Upon Delivery

Check that no transport damage has occurred during delivery; if any has occurred, read further instructions under right of return. If the bath is to be lifted using a tractor or truck, it must be lifted in the pallet that the bath is standing on. If you have ordered crane truck delivery, the bath is lifted in the tension straps located under the bath, marked according to the pallet. The straps need to be taken off but can remain where they are. The straps have no load-bearing function when the bath is in place. The bath must not be tilted and it is important that the bath is handled carefully during delivery and assembly. If you have not ordered crane truck delivery, the bath must be lifted off with a tractor or truck, long forks must be used.

Upon delivery, the technology box is in the bath. The technology box weighs approximately 40 kg and it can be lifted out of the bath by two people, important that it is handled carefully so that no parts are subjected to impact damage. The two white straps located around the technology box must be used for lifting. The technology box must be lifted in the floor and not in the walls.

The technology box is placed at the same ground level or max 2 meters below the bath and it is important that the filter is at or below the highest point ends up below the water surface. Otherwise you risk getting air in the system which will lead to the system not functioning as it should. The technology box must be placed within 7 meters from the bath and preferably as close as possible. Hoses that end up outside the insulation must be insulated. Hose and insulation is included if you place the technology max 2 meters from the bath. If the bath is to be located further away, additional hose and insulation needs to be purchased.

If the built-in installation and start-up of the technology and the bath does not take place immediately, the technology box needs to be stored in a warm space until it is started up if there is a risk of freezing.

Built-in Installation

THE SUB-WORK

- THE FOUNDATION IS AN IMPORTANT PART OF THE BUILT-IN INSTALLATION AS THE BATH WITH WATER AND MANY BATHERS CAN REACH GREAT WEIGHTS.
- The sub-work differs somewhat depending on the conditions you have. The bath must be placed on a level and stable surface, for example packed gravel, a poured slab or reinforced decking. If the bath is to be buried completely or partially, you need to check if the ground needs to be drained. Contact a building engineer or building architect if you are unsure whether the surface holds for the weight or not.
- The bath must never stand in such a way that it gets waterlogged around the bath, the bath needs to stand on a dry and drained surface.
- Faulty installation or damage that arises due to this is not covered by the warranty.
- Check how and where you should release the water so that no problems arise in the future.
- When you build in your bath, it is important that you consider that in the future it must be possible to access the bath for any service and/or replacement of parts. Connection side, sides with massage and lighting need to have a frizon (free zone) of 80x150 cm so that there is space for any service.
- The bath must be placed indoors, make sure that you have a sufficiently good ventilation system. As well as a moisture protection and slip protection around the bath.
- It is your own responsibility to make sure that an authorized electrician connects the bath.
- The bath is delivered in a sturdy construction of Eps insulation. Therefore you have an extremely well-insulated bath. No additional support or insulation needs to be built onto the bath.
- You do not need to backfill against the bath. When you backfill, support must be built around the bath if the insulation is to hold against the pressure against the ground. Also think about not backfilling against sides where service space is needed.

Warning: Turn on the power before the bath is completely filled with water and all parts are mounted according to instructions. Make sure to use an externally approved residual current device. The spa must be directly connected to the mains, without plug connectors, extension cords, or share phase with other appliances. The spa requires that the user has solid copper cable, depending on the size of the residual current device that the user has. The power supply must have a suitable residual current device and must be able to be used with a switch. All parts in the bath are documented function-tested according to a separate enclosed protocol. Your test protocol comes with the bath. Despite the controller controlling that all lamps work and that no connections leak before you build into your bath so much that it becomes difficult to adjust these parts. When the bath comes up to over 35 degrees you need to check the connections again as the warm water can affect the connections and they may need to be tightened.

Assembly of the Bath

When the bath and the technology unit are in place, the parts must be connected together.

Step 1. Open the lid of the technology box. And take out the zip bag with four hose clamps.

Step 2. Take out the hose insulation and hose.

Step 3. Then install the hose on the connections. The hose is installed with hose clamps. You tighten the hose clamps with a 7 mm hose chisel. Two hoses must be installed. The hose must be installed from the connection on the bath marked A to the connection on the technology marked with A. Then the same thing between B and B. Then cover the hose with hose insulation. The thinner hose insulation must be closest to the bath. You get with the bath 2x1 dm pieces to install closest to the bath, then the thicker hose insulation is installed after these. Use insulation tape for the joints.

Step 4. The display that controls your bath is located on the top of the bath.

The cable is marked and comes out at the connection side of the bath. It must be connected to the cable that sits on the heater A or marked with display cable.

Step 5. Your hot tub is equipped with Wi-Fi control, allowing you to monitor and control it directly from your mobile phone. The Wi-Fi equipment is supplied in a box inside the equipment compartment upon delivery. The system consists of two CMS units. CMS Unit 1 is pre-installed in the equipment compartment, while CMS Unit 2 must be connected to your home router.

For the Wi-Fi function to operate correctly, a static IP address is required. If your network uses a dynamic IP address, communication may be affected. This setting can be configured in your Wi-Fi router.

To use the Wi-Fi control, download Balboa's ControlMySpa app.

For detailed instructions on how to connect ControlMySpa, scan the QR code below. It will take you to the installation guide.

CMS Code: KTE-69496

Step 6. The drain connection is factory-mounted on the filter housing. To enable emptying of the bath, the Gardena coupling (male) must be installed in the Gardena coupling (female) which sits on the filter. The hatch valve must always be closed, except when emptying the bath or during filter replacement (see separate instructions for filter replacement). Then connect a 1.5" garden hose to the Gardena coupling to safely and in a controlled way lead the water away from the bath.

Step 7. Carefully remove the protective plastic from the inside of the bath. Rinse out any dirt.

Step 8. Now have the electrician connect the bath to the mains. It must be connected according to the enclosed wiring diagram. On the heater is the electrical document. IMPORTANT! The electrician must fill in the checklist for the warranty to be valid.

Step 9. Fill the bath with water. If the temperature is too cold in the water, the error message will come: "Possible Freeze Condition". The system starts the circulation and heats the bath until there is no longer a risk of freezing. Fill the bath until 10cm from the edge.

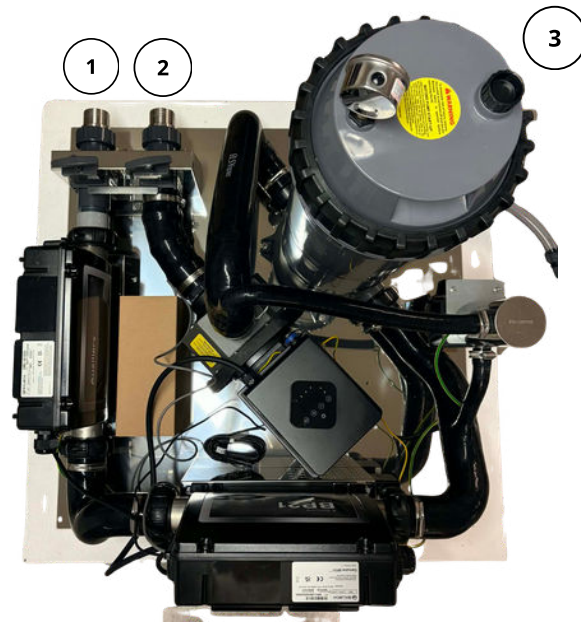
Step 10. Open the handle on hatch valve 1 and 2. The technology unit now becomes filled with water.

Step 11. Turn the black nut (marked on picture as 3) which sits on top of the filter housing about 1 to 1 ½ turns. It will hiss out a little air and eventually run out a little water. Screw the nut tight again.

Step 12. The power must be switched off until the water level has come up to 10 cm from above the edge of the bath. Turn on the power when the bath is filled with water and you have checked that no leakage has occurred. NOTE! The pump must under no circumstances be started without water, as the shaft seal then risks being damaged.

Step 13. Check that no leakage is visible in any connection then install the insulated cover lid on the bath. To increase the protection against pests, you can possibly seal any gap space that arises at the hoses with foam.

ControlMySpa guide



Set up the bath

Now the bath is up and running. What you start with is setting the clock. See the separate manual for how to set the clock and the remaining settings. The clock must be set every time the power is cut. The bath comes preset to a temperature of 37 degrees and with filter cycle of 2x8 hours (8-17 & 21-06). We recommend that you start with these two filter cycles. The lengths of the filter cycles may then need to be adjusted depending on how the bath is used.

Do not set any Cleanup cycle (it must not be used at all for your bath); instead, use Filter cycles.

Make sure that no air comes into the filter container. You vent the filter on the black nut (no. 3 in the picture, see previous page) on the filter.

Right of Return & Shipping Damage

Since your bath is a custom-manufactured product, the right of withdrawal under the Distance Contracts Act does not apply. Should you, against expectations, feel that this bath upon delivery was not at all what you had expected, contact us to look into the possibilities for a possible return. You will be charged for shipping costs as well as any additional costs, such as assembly and/or handling costs, and other deductions may also be made. Baths drawn completely or partially according to the customer's wishes are not subject to right of return.

If the bath has received shipping damage, it is important that you photograph these before unloading takes place from the transport vehicle.

A signature from the driver on the delivery note is also necessary in order to receive any compensation.

Send an email to info@elsyspas.com with pictures and an explanation of what has happened within three days from delivery.

In other respects, we follow the Consumer Sales Act and the Distance Contracts Act. In the event of any dispute, we follow the recommendations of the General Complaints Board (Allmänna Reklamationsnämnden). For more information, read our purchase terms on the website.

Maintenance

If you have a lot of iron, lime, hard or soft water, then this must be adjusted within the limit values immediately so as not to cause damage to the bath. Change the water at regular intervals. When you chlorinate water, the water eventually becomes saturated with chlorine, even though you can measure it to zero in chlorine value, therefore you need to change to fresh and new water even if you have good water values. It can sometimes be enough to change about half of the water. If you have problems getting good water quality, it is best to change all the water and refill with new. If you have the wrong water values and find it difficult to adjust these, change the water and start over with the measurement and adjustment.

To maintain good water hygiene, it is important that you keep track of your water values. If you have very hard, soft or iron-rich water, you also need to adjust this so as not to risk getting coatings, discoloration, damage or corrosion in your bath. The pH, chlorine, alkalinity, hardness and cyanuric value must also be checked.

It is extremely important that you are careful and do not overdose or shock chlorinate your stainless bath. Too much chlorine can damage your bath, no warranties apply for damage caused by high chlorine dosage. Be careful to dissolve all chemicals before you add it to the bath. You can get rust stains on the plate if you are not careful with this.

The filter you have in your bath is a cartridge filter. These filters need to be cleaned at regular intervals, how often depends on how your bath is used. You can with advantage have a filter at home so you can clean the one and let it dry while the other is used. You will find filter cleaning on our website.

The lowest permitted temperature for the water is 10 degrees, if the water is ten degrees, the technology box will also need to hold this temperature.

The bath must not be turned off for a longer time with water in it. If you turn off and empty your bath, be careful to rinse the bath clean so that no water with chlorine residues remains in the bath, this can cause damage to the bath. Clean with the supplied cleaning agent and cloth.

Baths with massage cannot be turned off in winter but must be kept running with a temperature of at least 10 degrees. Baths without massage may be turned off, then the technology box must be removed in order to be stored frost-free. Hoses and connections to the bath must be blown dry. Think about the fact that moisture or rain can come in that can later freeze, if this occurs it is not covered by warranty.

Frost damage or chlorine damage on the bath or technology is not covered by the warranty. Other damage caused by external factors is also not covered by the warranty.

The plate can be polished with two different polishing cloths as well as an agent, this comes with the bath and can also be ordered from our website.

SALT WATER Do not use salt water in these baths. No warranty applies on the bath if salt water is used.

UV- LJUS

Your bath is equipped with UV light, which means that you do not need to have as much chlorine in the water. The UV lamp has an estimated lifespan of just over a year and must be replaced once a year. See instructions on the last page.

Ideal values for your bath water

pH-value 7.0 – 7.4

Alkalinity value 80 - 120 mg/l (ppm)

Hardness level 125 - 200 mg/l (ppm)

Chlorine 0.5 - 1.0 mg/l (ppm)

It is good if you leave the cover on your bath for about 20 min after you have added chlorine. This is to protect the cover from the chlorine fumes that arise during dosing.

- As soon as you have filled your bath with water, you should start checking your water quality.
- All dosing instructions are average values that may need to be adjusted somewhat to the measured values that you just have.
- Clean hoses every time you change water.
- NOTE! Never mix the chemicals, it can lead to strong reactions and release dangerous gases! Chemicals must never be added at the same time.
- Take care when handling chemicals, preferably use safety glasses and gloves.

Test your water values

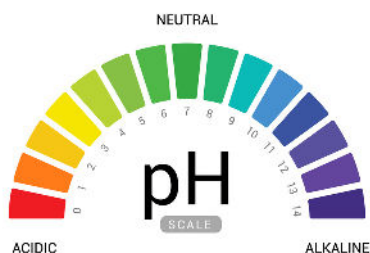
To test your bath water, you need a digital tester. You must regularly test pH, chlorine, alkalinity, cyan and the hardness of your water. It is your responsibility that the values are kept within the set levels. Salt must not be used in our stainless steel baths.

Too high chlorine values are harmful to your bath and damage that arises is not covered by the warranty.

All chemicals must be diluted with water in a bucket before it is added to the bath. Make sure that the circulation is on in the water when the chemicals are added. This applies if nothing else is stated on the bottle/jar at dosing. **Make sure to only use agents adapted for spa, NOT for pool.**

Correct pH in your bath

Correct pH-value is fundamental for good water quality. Therefore, it is absolutely necessary to set the pH-value so that it lies within the ideal range 7.0 – 7.4. The pH-value affects all water values.



pH over 7.4 is a too high pH and can cause:

- skin and eye discomfort
- lime deposits
- The disinfectant's effect is reduced.
- The greater the deviation is from the ideal pH-value 7.4, the greater the side effects are.

pH below 7.0 is a too low pH and can cause:

- Can cause irritation in mucous membranes and eyes.
- Corrosion on metallic parts

To adjust your pH, use pH + or pH - in your bath. A strongly fluctuating pH can be due to a low alkalinity value.

Alkalinity

In a spa it can be difficult compared to a pool to set a correct pH-value. It can also vary strongly when you add a pH-agent. In many cases it is a too low alkalinity value that is the cause of the strong variation. You can raise the alkalinity with Delphin spa alkalinity up which then facilitates the setting of the pH-value. Optimal alkalinity value lies between 80-120 mg/l.

Hardness

The ideal total hardness is 125 – 200 mg/l. Water with too low a hardness level can be very aggressive. Metal parts corrode and the surface can be attacked. The hardness of the water is determined mainly by minerals in the form of calcium and magnesium. Delphin spa Hardness Up adds calcium to the water and thereby raises the hardness level and guarantees an even hardness level in the water.

If the water is hard, there is a risk of lime deposits and the water in the spa can become cloudy and discolored. Lime and metal ions occur in the dissolved state in the water, but if the water is too hard it can lead to deposits on walls as well as on the filter. Delphin spa Lime Stabilizer lowers the water's hardness and thereby prevents precipitations and deposits. **It is very important that you check what hardness you have on your water in our stainless steel baths.**

Disinfection based on chlorine Ideal chlorine value: 0.5 - 1.0 mg/l (ppm)

For disinfection with chlorine, the chlorine content should always lie within the range 0.5 – 1.0 mg/l (ppm). We recommend Delphin's chlorine in granulate form. **Very important to dissolve chlorine and other chemicals before dosing, otherwise you get spots in the stainless steel bath, grains can also stick to the skimmer or similar which gives rust stains.**

Since the stainless steel baths are sensitive to hard chlorination, it is important that you keep track and add chlorine in small amounts regularly to maintain an even chlorination. **You must not shock chlorinate the stainless steel baths. Also do not use chlorine pucks in a dispenser.**

Think about setting the correct pH-value before disinfection of the water. If there is a wrong pH-value, the chlorine agent does not work. The chlorine value must not exceed the recommended range. If the test results show that the chlorine value is too high, there are two options. The fastest way to lower the value is by adding Delphin Antichlorine which removes excess chlorine in the water. Alternatively, all the water or parts of the water can be changed out. This should be done if the chlorine value lies above 3 ppm.

Salt water must not be used in our baths.

Cleaning of the pipe system

The pipe system in the spa needs to be cleaned regularly to prevent any bacterial growth in the pipes. Coatings in the pipes also impair the spa's functions. Delphin SPA Pipe Cleaner removes this biological layer and cleans the pipe system. How often you need to do this depends on how careful you are in general with managing your bath water. You do not need to do a hose cleaning at every water change. Clean the pipes just before a water change. To clean the pipes, add Delphin SPA Pipe Cleaner to your spa which should be completely filled with water, circulate the water for a short while, drain the water and then rinse off the spa. Refill with fresh water.

Troubleshooting for water problems

Do you have cloudy water, milky-brown or green hue to the water? Or does the water smell bad or foam? Then you need to troubleshoot to find what causes these problems.

Step 1: Test the water values. Start by checking pH and chlorine. Then alkalinity and hardness may need to be tested. The pH-value must lie between 7.0 and 7.4. This is important since the pH-value affects the disinfection and other water values. If the pH-value is too high, the chlorine agent does not work. Double-check the pH-value again after you have carried out a chlorination and adjust if necessary. Adjust the pH-value if needed so that it lies between 7.0 and 7.4. If you measure a pH-value below 7.0, raise the pH-value with Delphin Spa pH Plus. If the test result lies above, lower the pH with Delphin SPA pH Minus.

Step 2: How does the filter look? The filter needs to be cleaned regularly. If you bathe a lot or have bad water and got growth, it needs to be cleaned more often. A good tip is to always have an extra filter at home so you can clean the dirty filter while the other is used. If the filter is very worn and ugly, it needs to be thrown away and replaced with a new one. The filter must dry completely after washing before it is reused.

Step 3: What filter cycles do you have set? How much the filter needs to run varies between seasons, how many bathers, how often you bathe. It is therefore common that you need to let the filter run more during the summer months when the bath is often used more. If you have problems with the water quality, then set up the filter cycles to 2x12 hours and then reduce the hours afterwards.

Step 4: Chlorinate your water. Wait one day and then measure the chlorine value again. The chlorine value should now lie between 0.5 – 1 mg/l (ppm). If the chlorine value is zero after the chlorination (no free chlorine in the water), carry out another chlorination. NOTE! Always check that the pH-value is correct before you carry out a chlorination. Since the stainless steel material is sensitive to too hard chlorination, no shock chlorination is recommended.

Step 5: Check the hardness and alkalinity of your water if you still have not achieved a good water quality. Read under hardness and alkalinity if you need to change these values.

Contamination of the pipe system

Coatings or contamination in the pipe system can lead to a good disinfection being impossible. Was it a long time since the pipe system was cleaned? Clean the pipe system and change the water.

The water does not become really clear

Are there small particles in the water that make it cloudy but which are too small to be caught up in the filter? They can be flocculated together with DELPHIN SPA Gentle Clarifier so that they stick in the filter. Clean the filter after you have dosed a flocculation agent as these otherwise clump together.

It smells of chlorine

Chloramines are the cause of the chlorine smell. Chlorine smell arises when free chlorine in the water "becomes consumed" and there is nothing, or only a little free chlorine left. It is in this way a sign that the water quality is starting to become bad and that more free chlorine is needed. Go through the five troubleshooting steps, if there is still a chlorine smell after that, we recommend that you change out all or parts of the water.

Cyanuric acid

It is fine to have a cyanuric acid level at 30-50 mg/l in the water. If the level increases to over 100 mg/l, our recommendation is to reduce the amount by draining some of the water and replacing with new.

Cloudy water and lime deposits

Cloudy water can be caused by lime in the water. Lime particles are normally dissolved in the water but if the water is too hard, it can lead to lime deposits and deposits on the wall as well as rust stains. Check the hardness when you suspect or know that you have hard water and add Delphin SPA Lime Stabilizer at a hardness level over 200 mg/l. You also must not have water that is too soft, as this can also give a water environment that causes rust in the bath.

Foaming water

Soap, body care products and cleaning agents are most often the cause of a lot of foam in the spa. Spray Delphin SPA Foam Fighter on the foam. Change the water or parts of the water in case of heavy foam formation. Always rinse very carefully if you have cleaned your bath with soap or the like, most often it is enough to wipe the walls with a cloth and warm water after a water change.

Metal parts corrode

The cause is faulty water quality. It may be that the pH-value is too low or has been too low for a longer period. Raise the pH-value to the ideal range 7.0 to 7.4. It can also be too high pH, too hard chlorinated, the alkalinity or cyan is wrong. It can also be several factors in combination that becomes aggressive for the plate. Also check the hardness level and raise or lower the hardness if needed. The hardness must lie between 125 - 200 mg/l (ppm).

Instructions for replacement of UV-C lamp

Important: The UV-C lamp must be replaced every 12 months to maintain optimal performance.

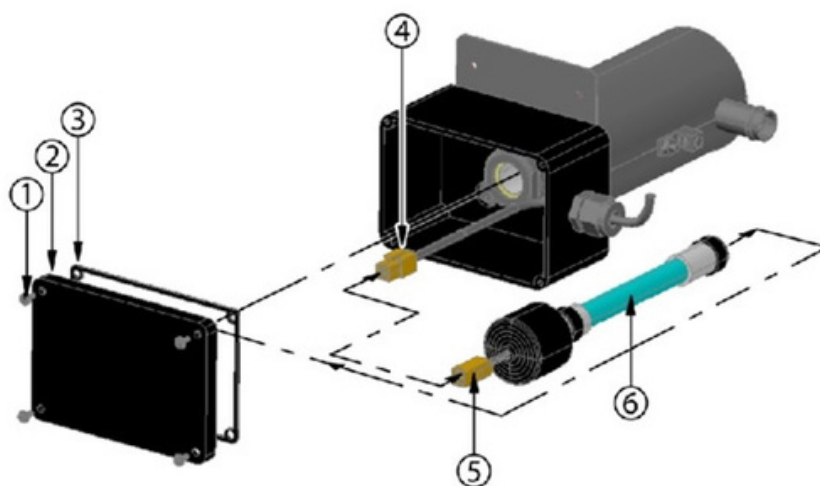
Warning

- Turn off the spa's power switch.
- Let the UV-C lamp (6) cool down before it is removed from the UV system.
- Never look directly at a lit UV-C lamp (6). It can cause serious eye damage or blindness.

Instructions:

1. Remove the UV system's housing cover (2) by removing the four star screws (1). Keep the seal (3) together with the housing cover (2) for later installation.
2. Use latex gloves when you handle the UV-C lamp (6).
3. Carefully disconnect the old UV-C lamp's connector (5) from the ballast connector (4).
4. Slowly remove the old UV-C lamp (6) from the UV unit.
5. Insert the NEW UV-C lamp (6) into the UV unit.
6. Reconnect the NEW UV-C lamp's connector (5) to the ballast connector (4). Check that the connectors are completely joined. Do not use force.
7. Reinstall the housing cover (2) with the seal (3) and screw on with the screws (1).
8. Reconnect the unit to the spa controller and put back the controller's lock.
9. Turn on the power to the spa.
10. When the power is on, you can check the ballast to see if the unit works.
 - A steady green light shows that the unit gets power and should always be on.
 - A steady red light shows that the UV-C lamp is activated.

Warning: The UV-C lamp used in this unit contains mercury. Dispose of the old UV-C lamp according to applicable waste regulations.



Instruction for how to change the filter in the bath:

1. Start by turning off the spa. Cut the power or set the bath in pause mode.
2. Then close the two hatch valves. (No. 1 in the picture)
3. Drain the filter of water, you do this by opening the hatch valve that sits at the filter. (not visible in the picture, hidden by the filter in the picture)
4. Open the air valve by turning approximately 1-2 turns. (No. 3 in the picture)
5. Unscrew the large black nut on the filter. (No. 2 in the picture)
6. Lift off the lid and take out the old filter.
7. The dirty filter you rinse off and let dry. The filter can with advantage be cleaned with a special cleaning agent for filter which can be ordered from us.
8. Insert the new filter or the cleaned filter and screw back the lid.
9. Close the hatch valve at the filter (Drain)
10. Open the hatch valves again (No. 1 in the picture)
11. Wait a little while, when water starts to flow out of the air valve you close it. (No. 3)
12. Start the installation. If you cut the power, then remember to set the clock again.

The filter you change to must be cleaned and dry or new. A filter can be reused until it starts to look worn out.

